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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,049	02/13/2006	Nicola Da Dalt	1435.128.101/12928	4105
25281 7590 11/07/2007 DICKE, BILLIG & CZAJA FIFTH STREET TOWERS 100 SOUTH FIFTH STREET, SUITE 2250 MINNEAPOLIS, MN 55402			EXAMINER GANNON, LEVI	
			ART UNIT 2817	PAPER NUMBER
			MAIL DATE 11/07/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/541,049	Applicant(s) DA DALT, NICOLA	
	Examiner Levi Gannon	Art Unit 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-19, 22-25 and 29-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-19, 22-25 and 29-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 June 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The objection to the drawings set forth in the Office Action mailed 6/5/07 are hereby withdrawn due to changes made by the Applicant.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17-19, 22-25, and 29-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Duff (GB 2 002 157; of record).

Regarding claim 17, Duff discloses a device (figure 2) for frequency synthesis comprising: an oscillator (11,30) driven for generating, at a frequency out of a set of at least two possible output frequencies (frequencies can be: frequency found at "IN" node, a divided frequency from 1 lb, or zero), an output signal (OUT); and a control device (20) for driving the oscillator (11,30), wherein the control device, for the purpose of generating a desired frequency that is not included in the set of possible output frequencies (by providing an average frequency), is configured to drive the oscillator to alternately generate at least two different output frequencies (frequencies can be:

frequency found at "IN" node, a divided frequency from 1 lb, or zero), out of the set of possible output frequencies, such that an average value of the generated output frequencies over a certain time period is substantially the desired frequency (note abstract), desired frequency, wherein the control device is configured to drive the oscillator such that the at least two generated output frequencies are alternated at an average frequency that is less than the at least two possible output frequencies (Switches 35/37, and 36/37 can be switched at any desired speed, specification page 2, lines 104-110.).

Regarding claim 29, the method as recited in the claim is inherently present in the structure as discussed above in the rejection of claim 17 rejections.

Claims 18, 19, 22-25, 30, and 31 stand rejected for the reasons of record set forth in the Office Action dated 6/5/07.

Response to Arguments

Applicant's arguments filed 9/5/07 have been fully considered but they are not persuasive.

Regarding Applicant comments directed to the rejection of claims 17 and 29 under 35 U.S.C. 102(b) over Duff, Applicant argues, "*This text of Duff GB Patent, however, does not disclose any statement regarding speed of the switching, such as defined in amended independent claims 17 and 29.*" Applicant also points out, "*This text of the Duff GB Patent explicitly recommends employing a high switching frequency and therefore teaches away from the control device being configured to drive the oscillator*

such that the at least two generated output frequencies are alternated at an average frequency that is less than the at least two possible output frequencies such as recited in amended independent claim 17 and from alternating the at least two generated output frequencies in an average frequency that is less than the at least two different output frequencies as recited in amended independent claim 29."

These arguments are not persuasive because Duff discloses a statement regarding the speed of switching. Duff teaches the ability to switch selectively open and close the switching means 3 and switching means 6 **for desired periods of time**. Note page 2, lines 104-110. Given this wide range of switching speeds, Duff allows for switching output frequencies at an average frequency less than the at least two possible output frequencies.

Also, while Duff teaches benefits of rapid switching (page 2, lines 22-27), as noted by the Applicant, Duff makes no mention of the switching speed with respect to the at least two output frequencies. **The only mention of switching speeds disclosed by Duff is that the switching means 3 and 6 may be opened and closed for desired periods of time, i.e. at any desired rate.** Note page 2, lines 104-110.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Levi Gannon whose telephone number is (571) 272-7971. The examiner can normally be reached on Monday-Friday 9:30AM-6:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

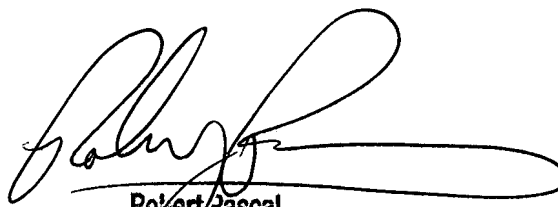
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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LG



Robert Pascal
Supervisory Patent Examiner
Technology Center 2800